

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT: ECONOMICS

27-APR 2025

PROGRAMME: BCOM. PURCHASING AND SUPPLY CHAIN MANAGEMENT DEGREE
.....

COURSE CODE SCM201: SUPPLY CHAIN RISK MANAGEMENT

DURATION: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Section A is compulsory
2. Answer any two (2) questions from section B.
2. Begin a new question on a fresh page.
3. Credit will be given for the use of appropriate examples
4. No cell phones are allowed in the examination room.

SECTION A

Answer the Question in this Section

QUESTION ONE

Case Study Telefon AB LM Ericsson

On 17 March 2000 there were thunderstorms in New Mexico, and lightning hit an electric power line (Latour, 2001). This caused a surge in power, which started a small fire in Philips' chip-making factory in Albuquerque. The automatic sprinkler system put this out within 10 minutes, and fire damage to the building was slight. Unfortunately, thousands of chips that were being processed were destroyed. But more importantly, the sprinklers caused water damage throughout the factory and smoke particles got into the sterile area, contaminating millions of chips held in stock. ,

Four thousand miles away, Ericsson was Sweden's largest company with annual revenue of \$30 billion, 30 per cent of which came from mobile telephones. For many years, Ericsson moved towards single sourcing as a way of lowering costs and speeding deliveries. Now the Philips plant was its sole source of many radio frequency chips, including those used in an important new product.

At first, Philips thought that the plant would return to normal working within a week, so Ericsson was not too concerned when it heard about the fire. However, it soon became clear that there was more extensive damage. Philips actually shut the factory completely for three weeks, it took six months for production to return to half the previous level, and some equipment took years to replace. Ericsson had no alternative suppliers, and at a time of booming sales it was short of millions of chips.

In 2001 Ericsson said production lost due to the fire cost it more than \$400 million. When this figure was published, its share price fell by 14 per cent in a few hours. For a variety of reasons, including problems with component supply, marketing mix, design, and the consequences of the fire, Ericsson's mobile phone division lost \$1.7 billion that year. It decided to withdraw from handset production and outsource manufacturing to Flextronics International. It also changed its approach to procurement, moving away from single sourcing and ensuring that there were always backup suppliers. And it also introduced systems for risk management to avoid similar problems in the future (Norman and Jansson, 2004).

Source: Waters, D. (2011). Supply chain risk management: vulnerability and resilience in logistics. Kogan Page Publishers.

- a) Define and justify the risk appetite of Telefon AB LM Ericsson. **[8 marks]**
- b) Using the risk matrix by Norman and Lindroth 2002, on which segment would you classify the Telefon AB LM Ericsson risk event? Justify our answer. **[10 marks]**
- c) Cite and explain risk mitigation strategies you would suggest to Telefon AB LM Ericsson? Justify your answer. **[15 marks]**
- d) Using the Business Continuity Management Model, what steps would Telefon AB

LM Ericsson undertake to allow their organization to continue working, and recover quickly after that damaging event. **[17 marks]**

SECTION B

Answer any Two Questions from this Section

Question two

- (a) Evaluate the technique of supply chain mapping in identifying and assessing risk. **[10 marks]**
- (b) Risk identification should be an ongoing process, as the organizations contractual risk profile may continually change, presenting new risks or turning slight risks into potential crisis. Critically evaluate the sources of supply chain risk. **[15 marks]**

Question three

- (a) Supply chain risk management is the identification and management of risk within the supply chain and risk external to it through a coordinated approach amongst supply chain members to reduce supply chain vulnerability as a whole. Outline and explain the supply chain risk management process. **[10 marks]**
- (b) Identify any organization of your choice, clearly state the supply chain risks they are exposed to and explain in detail the consequences of the risks. **[15 marks]**

Question four

- (a) The resources allocated for risk management will reflect the business sector the organization operates in, the nature of its vulnerabilities, and the extent of its exposure. Discuss the resources of risk awareness in a supply chain. **[15 marks]**
- (b) Explain in detail the importance of risk awareness throughout the supply chain. **[10 marks]**

Question five

- (a) When all members of a supply chain work on their risk management in isolation the results are rarely good or even satisfactory. Suggest strategic ways of achieving an integrated approach throughout the supply chain. **(10 marks)**
- (b) Discuss the problems with integrating supply chain risk management throughout the supply chain. **[15 marks]**

THE END